

6. A method of making a glycosylated antigen-binding antibody fragment having a reactive ketone group on the glycosylated site, comprising:

transfecting SP2/0 cells with a vector encoding an antibody having one or more N-glycosylation sites in the CH1 or V κ domain in a culture medium comprising a ketone derivative of a saccharide or saccharide precursor,

expressing said transfected SP2/0 cells so that they produce a glycosylated antibody having a reactive ketone group on the glycosylated site, and

fragmenting the resulting glycosylated antibody into a glycosylated antigen-binding antibody fragment having a ketone group on the glycosylated site.

8. A method of making an immunoconjugate comprising a glycosylated antibody conjugated to an agent through its glycosylated site, comprising:

transfecting SP2/0 cells with a vector encoding an antibody having one or more N-glycosylation sites in the CH1 or V κ domain in a culture medium comprising a ketone derivative of a saccharide or saccharide precursor,

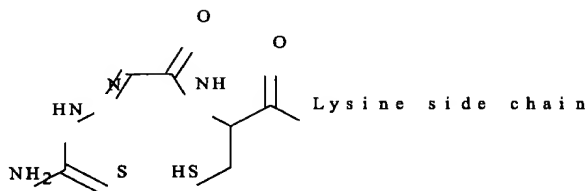
expressing said transfected SP2/0 cells so that they produce a glycosylated antibody having a reactive ketone group on the glycosylated site,

reacting the resulting antibody with an agent comprising a ketone-reactive group selected from the group consisting of hydrazides, hydrazines, hydroxylamines, and thiosemicarbazides, and

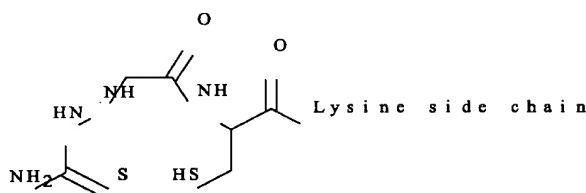
conjugating said glycosylated antibody to an agent through its glycosylated site.

14. The method of claim 8, wherein the agent is a ligand-containing peptide selected from the group consisting of diethylene triamine pentaacetic acid-bearing (DTPA-bearing) peptides, 1,4,7,10-tetraazacyclododecane-N,N',N''N'''-tetraacetic acid-bearing (DOTA-bearing) peptides, AcK_dD_dK_d(TscGC)D_dK_d-NH(CH₂)₄CH(NH₂)CONH-NH₂, AcK_dD_dK_d(TsdGC)D_dK_d-NH(CH₂)₄H(NH₂)CONH-NH₂, and H₂N-NH-CH₂-CO-D_d-K_d(TscGC)-D_d-K_d-NH₂, where K_d and

D_a represent the D-amino acids D-lysine and D-aspartic acid, respectively, and where TscGC is the ligand:



and TsdGC is the ligand:



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16. A method of making an immunoconjugate comprising a glycosylated antigen-binding antibody fragment conjugated to an agent through the glycosylated site, comprising:

transfecting SP2/0 cells with a vector encoding an antibody having one or more N-glycosylation sites in the CH1 or V_K domain in a culture medium comprising a ketone derivative of a saccharide or saccharide precursor,

expressing said transfected SP2/0 cells so that they produce a glycosylated antibody having a reactive ketone group on the glycosylated site,

fragmenting the resulting antibody into an antigen-binding antibody fragment, and

reacting the antibody fragment with an agent comprising a ketone-reactive group selected from the group consisting of hydrazides, hydrazines, hydroxylamines, and thiosemicarbazides.

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19. A glycosylated antibody or antigen-binding antibody fragment having a reactive ketone group on a glycosylated site, wherein said glycosylated site is in the V κ or the CH1 domain.

20. The glycosylated antibody or antigen-binding antibody fragment of claim 19, wherein said glycosylated site is selected from the group consisting of HCN1, HCN5 and V κ -N.

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22. An immunoconjugate comprising a glycosylated antibody or antigen-binding antibody fragment conjugated to an agent through a reactive ketone on a glycosylated site, wherein said glycosylated site is in the V κ or CH1 domain.

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23. The immunoconjugate of claim 22, wherein the glycosylated site is selected from the group consisting of HCN1, HCN5 and V κ -N.

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30. A method of targeting an active agent to an *in vivo* target site comprising administering an immunoconjugate comprising a glycosylated antibody or antigen-binding antibody fragment conjugated to an active agent through the or antigen-binding antibody fragment conjugated to an active agent through a glycosylated HCN1, HCN5 or V κ -N glycosylation site.

33. A method of targeting an active agent to an *in vivo* target site comprising:
administering a glycosylated antibody or antigen-binding antibody fragment having a reactive ketone group on a HCN1, HCN5 or V κ -N glycosylation site, and allowing the antibody or antibody fragment to localize at the target site;

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optionally, administering a clearing agent to clear non-localized antibody or antibody fragment from circulation; and

administering an active agent comprising a ketone-reactive group selected from the group consisting of hydrazides, hydrazines, hydroxylamines, and thiosemicarbazides, whereby the active agent localizes at the target site via conjugation with the pre-targeted antibody or antibody fragment.

Please enter the following new claims into the record.

38. (New) A method of making a glycosylated antibody having a reactive ketone group on the glycosylated site, comprising:

transfecting SP2/0 cells with a vector encoding an antibody having a HCN1, HCN5 or V κ N-glycosylation site in a culture medium comprising a ketone derivative of a saccharide or saccharide precursor, and

expressing said transfected SP2/0 cells so that they produce an N-glycosylated antibody having a reactive ketone group on the glycosylated site.

39. (New) A method according to claim 38, wherein said antibody is hLL2HCN1, hLL2HCN5 or hLL2V κ -N.

40. (New) A method according to claim 39, wherein the ketone derivative of the saccharide or saccharide precursor is selected from the group consisting of N-levulinoyl mannosamine and N-levulinoyl fucose.

41. (New) A method making a glycosylated antigen-binding antibody fragment having a reactive ketone group on the glycosylated site, comprising:

transfecting SP2/0 cells with a vector encoding an antibody having a HCN1, HCN5 or V κ N-glycosylation site in a culture medium comprising a ketone derivative of a saccharide or saccharide precursor,

expressing said SP2/0 cells so that they produce a glycosylated antibody having a reactive ketone group on the glycosylated site, and

fragmenting the resulting glycosylated antibody into a glycosylated antigen-binding antibody fragment having a ketone group on the glycosylated site.

42. (New) A method according to claim 41, wherein said antibody is hLL2HCN1, hLL2HCN5 or hLL2V κ -N.

43. (New) A method according to claim 42, wherein the ketone derivative of the saccharide or saccharide precursor is selected from the group consisting of N-levulinoyl mannosamine and N-levulinoyl fucose.

44. (New) A method of making an immunoconjugate comprising a glycosylated antibody conjugated to an agent through its glycosylated site, comprising:

transfecting SP2/0 cells with a vector encoding an antibody having a HCN1, HCN5 or V κ N-glycosylation site in a culture medium comprising a ketone derivative of a saccharide or saccharide precursor,

expressing said transfected SP2/0 cells so that they produce a glycosylated antibody having a reactive ketone group on the glycosylated site,

reacting the resulting antibody with an agent comprising a ketone-reactive group selected from the group consisting of hydrazides, hydrazines, hydroxylamines, and thiosemicarbazides, and

conjugating said glycosylated antibody to an agent through its glycosylated site.

45. (New) A method according to claim 44, wherein said antibody is hLL2HCN1, hLL2HCN5 or hLL2V κ -N.

46. (New) A method according to claim 45, wherein the ketone derivative of the saccharide or saccharide precursor is selected from the group consisting of N-levulinoyl mannosamine and N-levulinoyl fucose.

47. (New) A method of making an immunoconjugate comprising a glycosylated antigen-binding antibody fragment conjugated to an agent through the glycosylated site, comprising:

transfecting SP2/0 cells with a vector encoding an antibody having one or more N-glycosylation sites selected from the group consisting of HCN1, HCN5 the V κ -N in a culture medium comprising a ketone derivative of a saccharide or saccharide precursor,

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expressing said transfected SP2/0 cells so that they produce a glycosylated antibody having a reactive ketone group on the glycosylated site,
fragmenting the resulting antibody into an antigen-binding antibody fragment, and
reacting the antibody fragment with an agent comprising a ketone-reactive group selected from the group consisting of hydrazides, hydrazines, hydroxylamines, and thiosemicarbazides.

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48. (New) A method according to claim 47, wherein said antibody is hLL2HCN1, hLL2HCN5 or hLL2Vκ-N.

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49. (New) A method according to claim 48, wherein the ketone derivative of the saccharide or saccharide precursor is selected from the group consisting of N-levulinoyl mannosamine and N-levulinoyl fucose.

50. (New) A method of making an immunoconjugate comprising a glycosylated antigen-binding antibody fragment conjugated to an agent through the glycosylated site, comprising:

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transfecting SP2/0 cells with a vector encoding an antibody having one or more N-glycosylation sites selected from the group consisting of HCN1, HCN5, ^{AD}the Vκ-N in a culture medium comprising a ketone derivative of a saccharide or saccharide precursor,

expressing said transfected SP2/0 cells so that they produce a glycosylated antibody having a reactive ketone group on the glycosylated site,

fragmenting the resulting antibody into an antigen-binding antibody fragment, and

reacting the antibody fragment with an agent comprising a ketone-reactive group selected from the group consisting of hydrazides, hydrazines, hydroxylamines, and thiosemicarbazides.

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51. (New) A method according to claim 50, wherein said antibody is hLL2HCN1, hLL2HCN5 or hLL2Vκ-N.

52. (New) A method according to claim 51, wherein the ketone derivative of the saccharide or saccharide precursor is selected from the group consisting of N-levulinoyl mannosamine and N-levulinoyl fucose.

53. (New) A glycosylated antibody or antigen-binding antibody fragment having a reactive ketone group on a glycosylated site, wherein said glycosylated site is selected from the group consisting of HCN1, HCN5 and V κ -N.

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54. (New) An immunoconjugate comprising a glycosylated antibody or antigen-binding antibody fragment conjugated to an agent through a reactive ketone on a glycosylated site, wherein said glycosylated site is selected from the group consisting of HCN1, HCN5 and V κ -N.

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55. (New) A glycosylated antibody having a reactive ketone group on a glycosylated site, prepared by a method as recited in claim 1.